

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

A-688  
Revision 2  
AERONCA  
KF  
50-F  
S-50-F  
March 7, 2005

AIRCRAFT SPECIFICATION NO. A-688

Type Certificate Holder                      National Aeronca Association  
806 Lockport Road  
P.O. Box 2219  
Terre Haute, IN 47802

Name change from Aeronca to National Aeronca Association March 7, 2005.

I - Model KF, 2 PCLM, Approved June 28, 1938.

Engine	Franklin 4AC-150 Series 50
Engine limits	Maximum, except takeoff                      -- in. Hg., 2300 rpm (50 hp) Takeoff (one minute)                      -- in. Hg., 2300 rpm (50 hp)
Airspeed limits	Level flight or climb - 100 mph True Ind. Glide or dive -- 135 mph True Ind.
Propeller	Maximum permissible diameter 81 in.
C.G. range	(+13.4) to (+20.5)
Empty weight	
C.G. range (See Note 3)	(+14.0) to (+20.4) (Item 310 not installed.) (+14.0) to (+18.2) (Item 310 installed.)
Maximum weight	1150 lbs.
Number of Passengers	1 (+21)
Maximum baggage	40 lbs. (aft of seat) (+45)
Fuel capacity	10 gallons (-10)
Oil capacity	1 gallon (-31)
Serial Nos. eligible	KF-1 and up manufactured prior to 12-11-42 eligible. Approval expired as of that date.

II - Model 50-F, 2 PCLM, Approved October 3, 1938.

(Same as model KF except for wider cabin. No structural changes.)

Engine	Franklin 4AC-150 Series 50
Engine limits	Maximum, except takeoff                      -- in. Hg., 2300 rpm (50 hp) Takeoff (one minute)                      -- in. Hg., 2300 rpm (50 hp)
Airspeed limits	Level flight or climb - 100 mph True Ind. Glide or dive -- 135 mph True Ind.
Propeller	Maximum permissible diameter 81 in.
C.G. range	(+13.4) to (+20.5)
Empty weight	
C.G. range (See Note 3)	(+14.5) to (+20.7) (Item 310 not installed.) (+14.5) to (+18.5) (Item 310 installed.)
Maximum weight	1150 lbs.
Number of Passengers	1 (+21)
Maximum baggage	40 lbs. (aft of seat) (+45)
Fuel capacity	12 gallons (-10)
Oil capacity	1 gallon (-31)
Serial Nos. eligible	F-1018 and up manufactured prior to 12-11-42 eligible. Approval expired as of that date.

III - Model S-50-F, 2 PCLM, Approved October 3, 1938.

Engine	Franklin 4AC-150 Series 50
Engine limits	Maximum, except takeoff -- in. Hg., 2300 rpm (50 hp)
	Takeoff (one minute) -- in. Hg., 2300 rpm (50 hp)
Airspeed limits	Level flight or climb - 95 mph True Ind.
	Glide or dive -- 129 mph True Ind.
Propeller	Maximum permissible diameter 76 in.
C.G. range	(+14.3) to (+21.4)
Empty weight	
C.G. range (See Note 3)	(+15.0) to (+21.0) (Item 310 not installed)
	(+15.0) to (+18.8) (Item 310 installed.)
Maximum weight	1253 lbs.
Number of Passengers	1 (+21)
Maximum baggage	40 lbs. (aft of seat) (+45)
Fuel capacity	12 gallons (-10)
Oil capacity	1 gallon (-31)
Serial Nos. eligible	F-1018 and up manufactured prior to 12-11-42 eligible. Approval expired as of that date.

Specifications Pertinent to all Models

Datum	Wing leading edge
Leveling means	Not available
Certification basis	Approved Type Certificate 688 (expired) (CAR 04)
	Production Certificate No. 2

Equipment: (\* Means net increase.)

## Class I.

## A. Landplane

101.	Propeller - wood (fixed or adj. pitch)	9 lbs.	(-43)
102.	6.00-6 wheels (Shinn 6C4) with tires	21 lbs.	(- 1)
103.	Tail skid		
104.	Carburetor air heater	2 lbs.	(-31)
105.	Wheel type control (Drawing 7-35)		
106.	Single magneto - Scintilla		

## B. Seaplane - Items 101, 104, 105, 106 PLUS

151.	Edo 60-1320 float installation including auxiliary fin, 169 lbs.	112 lbs.*	(+25)
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## Class III.

301.	Wheels		(- 1)
	(a) 3 in. (Goodyear 3-LMBM) with brakes	10 lbs.*	
	(b) 6.00-6 (Shinn 6C4B or 6C4HB) with brakes	5 lbs.*	
	(c) 3 in. (Goodyear 3-LMBM)	1 lb.*	
302.	Tires		
	(a) 18x8-3 with tubes	4 lbs.*	(- 1)
	(b) 16x7-3 with tubes Neglect weight		
303.	Tail wheel installation		
	(a) Shock cord type with 6x2.00 wheel and pneumatic tire (Dwg. 7-27)	1 lb.*	(+174)
	(b) Leaf spring type with 6 in. wheel and solid tire (Dwg. 4-104)	2 lbs.*	(+180)
	(c) 6x2.00 steerable	3 lbs.*	(+179)
304.	Cabin heater	2 lbs.	(+ 28)
305.	Carpet	2 lbs.	(+ 1)
306.	Magnetos		
	(a) Single Wico or Eisemann Net door	3 lbs.*	(- 23)
	(b) Dual Scintilla	11 lbs.*	(- 23)
	(c) Dual Wico or Eisemann	5 lbs.*	(- 23)
307.	Wheel streamlines	8 lbs.	(- 1)
308.	Battery	Maximum 20 lbs.	(+ 48)
309.	Extra door	2 lbs.	(+ 21)

310.	5-gallon auxiliary fuel tank (See Note 1)	10 lbs.	(+ 29)
311.	Special instruments	6 lbs.	(- 1)
312.	Parachutes (one or two)	20 lbs. each	
313.	Radio equipment		
	(a) Receiver (RCA AVR-15 or -15A)	11 lbs.	(- 5)
	(b) Receiver (RCA AVR-10 or -10A)	9 lbs.	(- 7)
	(c) Receiver (Learadio AMR-1 or AMRL-1)	11 lbs.	(+ 43)
	(d) Transmitter (Learadio AMT-1)	9 lbs.	(+ 45)
	(e) Loop antenna	2 lbs.	(+ 36)
	(f) Trailing antenna	1 lb.	
	(g) "T" type antenna	Neglect weight	
	(h) Reel type trailing antenna	3 lbs.	(+ 79)
314.	Anchor and rope	7 lbs.	(+ 2)
315.	Ski type axle (Dwg. 3-43 or 3-44)	Neglect weight	
316.	Landing lights (Grimes ST-250) One or Two	5 lbs. each	(+ 17)
317.	Stick type control (Dwg. 7-70)	No weight change	
318.	Parking brake installation	1 lb.*	(- 6)
319.	Generator - wind-driven (Air Assoc. G-6 or G-12)	8 lbs.	(+ 9)
320.	Seaplane fittings	Neglect weight	
321.	Steps (two)	Neglect weight	
322.	Skis	Use actual weights	
	(a) Washington Aircraft 1200		
	(b) Federal SA-1 or SA-2		
	(c) Federal SC-1 or SC-2		
	(d) Marston MFS-1200		
	(e) Marston MFS-1600		
	(f) Jennings TY-2		
	(g) Richards 1-B		
	(h) Graf-Shupe A		
	(i) Heath 655		
323.	Oil filter, Fram PB-5 (Models 50-F and S-50-F only)	4 lbs.	(- 31)
	Fram Installation Drawing No. 61552		
	Weight includes one quart of oil.		

NOTE 1. Fuel arm (+48) with item 310.

NOTE 2. Eligible for export as follows, subject to provisions of Chapter XII of Inspection Handbook: (6-2-41)

- (a) Canada
  - Landplane - eligible.
  - Skiplane - not eligible. However, structure complies with Canadian requirements for ski installation when item 315 is installed, with tread not exceeding that with wheels and a maximum ski height of 12 inches.
  - Seaplane - maximum weight 1253 lbs.
- (b) Australia
  - Landplane only.
- (c) All other countries except New Zealand.

NOTE 3. If empty weight C.G. for a particular airplane falls within range given, it is unnecessary to check critical forward and aft C.G. positions. These ranges are not valid for non-standard arrangements.

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